

# **Telecommunications Services: Achieving Cost Savings and New Efficiencies**

Submitted in Accordance with C.G.S. 4d-14

State of Connecticut Department of Information Technology  
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# Introduction

Having the right staffing levels and tools in place to properly manage and control telecommunication costs can yield great monetary and operational benefits to the State of Connecticut.

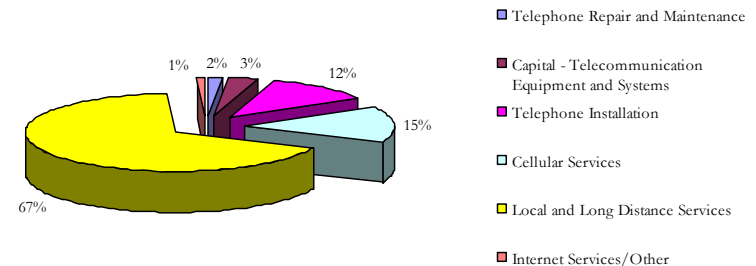
The state spent more than twenty-two million dollars on telecommunication services and equipment in fiscal year 2005.

- Reducing overall telecommunication costs even by ten percent would yield \$2.21 million in savings.
- A 20 percent reduction would achieve \$4.42 million in savings.
- Additional opportunities to save can be obtained through standardization and guiding agency choices.

This report, submitted in accordance with C.G.S. 4d-14, presents recommendations and options to bring telecommunication cost savings and efficiencies to the State of Connecticut.

It also presents the tools and staff resources the Department of Information Technology (DOIT) requires to execute them.

## State Telecommunications Spending Fiscal Year 2005



### Telecommunication Expenditures: **\$22,197,046.60**

Internet Services/Other	212,175.04
Telephone Repair and Maintenance	342,889.72
Capital – Telecomm. Equipment/Systems	724,588.26
Telephone Installation	2,557,629.35
Cellular Services	3,366,187.06
Local and Long Distance Services	14,993,577.17

# Executive Summary

In 2005, DOIT embarked on an aggressive path to improve customer service and add value through cost savings and new efficiencies for the State of Connecticut. Telecommunication services provided by DOIT to client agencies are included in the scope of this new direction and are the primary focus of this report

DOIT has the statutory authority and responsibility to contract and bill for telecommunication services and equipment used by state agencies throughout the executive branch.

DOIT is also responsible for assisting agencies in the design and implementation of telecommunication systems. These two areas account for more than \$22 million in telecommunication spending in fiscal year 2005 alone.

Over the past twelve months, DOIT achieved more than \$7.9 million in telecommunication savings – nearly 20 percent of total state telecommunication spending - through three primary vehicles: lower contract rates; bill auditing, and telecommunication and network optimization projects.

To achieve even greater savings, DOIT must keep contracts current, simplify choices for agencies, provide more cost saving guidance to agencies, and expand in-depth system consulting to agencies.

The means to carry these activities out are increased staffing resources and more modern tools to manage the state's overall telecommunication infrastructure. The combination of these resources will ensure long term savings and efficiencies can be achieved, sustained and increased.

DOIT is requesting approval for 12 additional full time employees (FTE's) members to execute responsibilities outlined above. Doing so will enable the State to achieve an estimated \$4 million annually in savings in telecommunication expenditures – or 18 percent.

# 12 Month Savings: \$7.9 Million

## Savings Achieved With Existing Staffing

Over the past twelve months, DOIT has realized approximately \$7.9 million in telecommunication savings. These savings have been achieved with our existing, limited staff though through three primary means:

### Contract Savings (43 Percent)

New telecommunication contracts covering more than twelve areas of telecommunications service have resulted in savings of more than \$3.7 million over the past twelve months. *This level of savings is a one time occurrence due to contract renegotiations.*

### Billing Audits (42 percent)

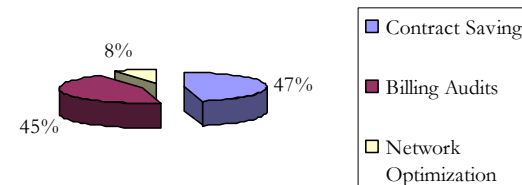
Catching billing errors during the pre-audit process has saved an additional \$3.6 million in cost-avoidance over the past year. Typical errors include rates not in compliance with contracts and extraneous charges such as taxes, and improper termination and connection fees.

### Telecommunications and Network Optimization (8 percent)

Network optimization services have yielded \$655,000 in savings to client agencies over the past 12 months. Services include strategic advice and planning with agencies for telephone system needs, network facilities, and identification and execution of cost-saving measures.

## 12 Month Savings By Source

10/04 - 10/05  
\$7,900,000



# Achieving Cost Savings and New Efficiencies

**Hiring 12 New FTE's to Collaborate and Focus on the Following  
Four Strategic Areas Would Net Between \$2.9 and 3.8 Million in Additional Annual Savings**

## **Keep Contracts Current (Five FTE's)**

DOIT must refresh contracts more frequently in order to ensure continued savings to the State. For years, DOIT purchased telecommunication services from contracts originally awarded in 1994. The contracts were not re-awarded until nearly a decade later. This resulted in savings of \$3.7 million in the first year alone, but it is clear the state lost millions per year in savings due to the delays in re-competing, evaluating and awarding these new contracts. We recommend master telecommunication contract renewals every three years and rate renegotiation every year to enable the state to take advantage of rates which continue to drop. DOIT estimates this will result in savings of an additional \$500,000 per year.

## **Simplify Choices (One FTE)**

DOIT must simplify choices for agencies. DOIT offers too many choices and not enough guidance for agencies to make optimal selections. This puts agencies at risk of selecting the wrong products and services. Cellular phone product plans and descriptions, for example, run 49 pages, detailing multiple configurations and options. Local exchange and long distance service plans and options run for 173 pages. Paring down selections will enable agencies to choose the most appropriate plan for their service needs. DOIT estimates this will result in savings between \$1.8 and \$2.7 million per year.

## **Expand In-Depth System Consulting (Three FTE's)**

DOIT receives more than 400 requests per year from client agencies for network and telecommunication infrastructure services. DOIT recommendations and subsequent agency actions have resulted in \$655,000 in savings over the past year. Additional staffing will enable DOIT to increase its work with agencies to achieve even greater savings, resulting in an additional \$655,000 in savings per year.

## **Increase Cost Saving Guidance (Three FTE's)**

DOIT can further increase savings with more frequent and thorough advisement to agencies on ways to lower their telecommunication bills. Modernization of the state's telecommunication billing management system will enable DOIT to generate more useful customized reports for agencies, such as unused cell phones, calling cards and phone lines. DOIT estimates this will result in savings of an additional \$1.11 million per year.

# Keep Contracts Current

*Five Additional FTE's Will Enable Telecommunication Contracts to Be Kept Up to Date and Save the State Up to \$500,000 Per Year.*

DOIT must be staffed to ensure the state can take advantage of dropping telecommunication prices.

The state's previous network services contracts were originally awarded in 1994 and not re-awarded until 2003 and 2004 - costing the state millions in potential savings each year.

Five network services contracts expire in 2006 and the remaining two expire in 2007. Current staffing levels will not guarantee these contracts are refreshed upon expiration, leaving DOIT no choice but to exercise optional contract extensions - a practice that should be the exception rather than the rule.

DOIT's procurement staff is currently being increased to keep up with normal technology procurement requests. This increase must be augmented with additional procurement and technical telecommunications staff to assist in the preparation and evaluation of new telecommunication requests for proposals (RFP's) and annual renegotiations.

This investment will enable new RFP's for expiring contracts to be issued on time and on schedule – resulting in estimated savings to the state of \$500,000 per year.

## Case Study

### *New Contracts Save Dollars*

#### **Interstate Call Rates – 70 Percent Reduction**

An interstate call, under the 1994 contract, had cost the State \$.085 per minute. The current per minute rates range from .024 to .046 cents per minute. For an agency that has migrated to a “digital trunking” system, the current per minute rate of \$.023 applies. That's over a 70 percent rate reduction.

#### **Primary Rate Interface (PRI) Lines – 70 Percent Reduction**

PRI lines supply dial tone and direct inward dialing to many of the State's telephone switches. They cost the State up to \$1,400 each month under terms of the 1994 contract. The same vendor, under the new contract, charges \$569 per line per month. Two additional vendors charge \$393 and \$400 per month – a reduction of 70 percent off of the original contract.

#### **Cisco Routers – 21 Percent Reduction**

Prior to the current router contract being awarded in May of 2004, the state was provided an 18% discount from the list prices of Cisco routers. The new contract provides a 39.1% discount – a 21% savings.

# Simplify Choices

*One Additional FTE Would Simplify Product Choices,  
Saving Between \$1.8 and \$2.7 million per Year.*

Current telecommunication and network contracts provide too many choices, increasing the risk that agencies will not make optimal product selections.

Limiting selections to “footprints” tailored to differing usage needs will make it easier for agencies to select the most cost-effective options for their service level needs.

Additional telecommunication technical specialists and procurement officers will enable DOIT to incorporate these requirements into contract refresh tasks.

Requiring vendors to propose a simplified menu of options rather than allowing them to offer an exhaustive list of configurations and services will enable greater control over costs and better value per telecommunication dollar. DOIT estimates that focus on this task would save ten to fifteen percent of overall telecommunication spending.

## Case Study

### Cellular Phones: *The Price of Too Many Choices*

The executive branch currently pays for service for 6,738 cellular phones. In FY 2005, this cost \$3,366,187.06 – fifteen percent of state telecommunication dollars, more than the state spent on all telephone installation, systems and equipment combined.

Simplifying the number of plans will induce agencies to switch to lower-cost plans.

In fiscal year 2005, DOIT migrated 17 percent , or 1,129, phones to the lowest cost plan, for annual savings of \$415,000.

The remaining 83 percent of phones use plans that cost more than double the lowest plan.

Helping agencies migrate the remaining 83 percent of state cell phones to lower cost plans could yield more than one million per year in savings.

# Expand In-Depth System Consulting

## *Expanding In-Depth System Analysis and Consulting Can Yield An Additional \$655,500 in Annual Savings*

DOIT's three Telecommunication Technical Specialists (TTS's) bring in-depth consulting expertise to bear on complex agency telecommunication projects and systems.

They have responded to more than 400 service requests over the past year alone, including strategic advice and planning with agencies for telephone system needs, network facilities, and identification and execution of cost-saving measures.

They bring an expertise that yields savings, but are currently shouldering responsibility for hundreds of locations.

Three additional TTS's will enable a backlog of projects and responsibilities to be met and additional annual savings of \$655,000 to be realized for network optimization consulting alone.

## Case Study

### *Expertise Saves Dollars*

Just three TTS's have saved \$655,500 through network optimization projects alone. They also achieved more than \$700,000 in savings through contract renegotiations.

- \$357,649 saved through network optimization services in state facilities, including \$110,802 in annual savings through reconfiguration of a decade-old system in the 410-470 Capitol Avenue complex housing five agencies and 1200 employees.
- \$31,333 in network conversions and over-billing credits
- \$87,327 through the reuse/transfer of existing systems within two agencies to another agency in need of a system
- \$179,196 in system reconfiguration for high volume call centers.

### *More Expertise is Needed to Control Costs*

- 409 telephone systems are currently in use produced by nine service providers. In addition, eight different voice mail systems are in use. Seven call accounting systems produced by six providers are in place.
- Complexity costs dollars. Expertise and standards help save them!



# Increase Cost Saving Guidance

## *Three Additional FTE's Can Help Achieve Up to \$1.1 million in Annual Savings Through Cost Saving Guidance*

DOIT must improve its ability to help client agencies reduce their telecommunication bills. DOIT is unable to regularly produce cost saving strategies and recommendations to client agencies due to staff shortages and lack of data.

Replacement of the telecommunication billing management system is essential -- it is antiquated, limited, and does not allow customized reports to be generated for analytical purposes for DOIT or client agencies. An RFI will be issued in FY 2006.

This, combined with increased staffing, would enable DOIT to issue spending analyses and regular, customized recommendations to agencies.

A Fiscal Administrative Officer (FAO) would work with the additional telecommunication technical specialists to monitor trends in agency telecommunication spending and devise tools and recommendations for lowering costs. A Communications Specialist would assist in issuing these recommendations through customer service publications and bulletins for agency staff.

These activities are estimated to achieve savings of up to \$1.1 million per year – 5 percent of annual telecommunication spending.

## Case Study

### Significant Opportunity Exists for DOIT to Find and Provide Cost Saving Tips for Agencies

#### Unused Cell Phones

September 2005 data shows that there are currently 740 unused cellular phones among 37 agencies with no usage. Agencies are paying an average of \$18.44 per month for these telephones. Cancelling these phones would achieve savings of \$163,747 per year – small savings for each agency but adding up to significant savings for the State.

#### Unused and/or Excess Phone Lines

There are approximately 90,000 phone lines statewide. Customized inventory and usage reports for agencies would enable agencies to identify and pull from service unused and/or excess lines. Retiring even two percent of such lines could save an estimated \$300,000 per year.

#### Toll Free Lines

More than 300 toll-free lines exist in the Executive Branch showing usage of 1.217 million minutes per month. DOIT conducted a spot check of the toll-free numbers for twenty state agencies located in the Hartford area. 18 out of 20 accepted a call from the local calling area – turning what should be a local call into a toll-call for the state!

#### 4-1-1 Calls

At a cost of \$.75 each for a land line, and an even greater cost using a cellular phone, 4-1-1 calls represent a major area for continued savings. Agencies have the option of blocking 411 calls altogether. Doing so with exceptions for law enforcement and other investigatory agencies could save more than \$200,000 per year.

# Staffing Request \*

## Cost of 12 New Full Time Employees (FTE's)

■ <u>Seven</u> Telecommunication Technical Specialists	\$715,176
■ <u>Three</u> Purchasing Service Officers (2 PSO II, One PSO 1)	265,795
■ <u>One</u> Fiscal Administrative Officer / Account Examiner	85,463
■ <u>One</u> Communication Specialist (Manager)	73,105

**Fully Loaded Costs:** **\$ 1,139,539**

These staff additions would augment existing staff and work specifically to achieve the following objectives to achieve savings in State telecommunication expenditures:

■ Keep Contracts Current	\$500,000
■ Simplify Choices for Agencies	1.8 - 2.7 million
■ Expand In-Depth System Consulting	655,500
■ Increase Cost-Savings Guidance	1.11 million

**Estimated Annual Savings:** **\$4,065,500 - 4,965,500**

**Net Annual Savings to State:** **\$2,925,961 - 3,825,961**

\* *Would require an adjustment to DOIT's statutory headcount*